ABSTRACT OF THE DISCLOSURE

A crossbar switch system with redundancy has N+1 cross-bar switches. A first cross-bar switch has first outputs of each of a plurality of nodes applied to N input terminals thereof, an (N+1) th cross-bar switch has Nth outputs of each of the nodes applied to N input terminals thereof, and second to Nth (Ith) cross-bar switches each have first to Nth selection circuits, which are provided at respective input terminals thereof, to each of which are input mutually adjacent (I-1) th and Ith outputs among outputs of each of the nodes. Each (Jth) node has N selection switches, which are provided at input terminals thereof, to each of which are input Jth outputs of two mutually adjacent cross-bar switches among the first to (N+1) th cross-bar switches. In response to a selection control signal output from a failure processing circuit that executes crossbar switch failure processing, each of the selection circuits selects and outputs one of its two inputs.